## ABSTRACT

A catalyst supply device (1) has a catalyst vessel (2) in which catalyst slurry (10) is placed; an automatic suction valve (3) connected to the downstream side of the catalyst slurry supply vessel (2); three-way piping (4) for connecting the automatic suction valve (3), automatic discharge valve (6), and a positive displacement pump (5); and the positive displacement pump (5) and the automatic discharge valve (6) that are connected to the three-way piping (4). The catalyst supply device (1) supplies the catalyst slurry (10) to a reaction vessel (7) without causing a catalyst (11) to enter into the inside of the positive displacement pump (5).